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APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/081,558 02/20/2002		02/20/2002	Satoshi Seo	07977-304001	1991
26171	7590	09/20/2005	EXAMINER		INER
FISH & RICHARDSON P.C.			•	SEFER, AHMED N	
P.O. BOX 10 MINNEAPO		55440-1022		ART UNIT	PAPER NUMBER
				2826	

DATE MAILED: 09/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/081,558	SEO ET AL.				
Office Action Summary	Examiner	Art Unit				
	A. Sefer	2826				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	<b>J.</b> lely filed  the mailing date of this communication.  D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 11 Ju	<u>ıly 2005</u> .					
2a)⊠ This action is <b>FINAL</b> . 2b)☐ This	This action is <b>FINAL</b> . 2b) This action is non-final.					
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4) ☐ Claim(s) <u>1-56</u> is/are pending in the application. 4a) Of the above claim(s) <u>1,3-17,19-25,27-33,3</u> 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) <u>2,18,26,34,50,57 and 58</u> is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	5-49 and 51-56 is/are withdrawn	from consideration.				
Application Papers						
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) access applicant may not request that any objection to the Replacement drawing sheet(s) including the correction of the oath or declaration is objected to by the Examine	epted or b) objected to by the formula of the ledge of by the following (s) be held in abeyance. See ion is required if the drawing (s) is object to be seen to be se	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119		•				
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau * See the attached detailed Office action for a list	s have been received. s have been received in Applicati ity documents have been receive u (PCT Rule 17.2(a)).	on No ed in this National Stage				
Attachment(s)						
1) Notice of References Cited (PTO-892)	4) Interview Summary					
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 8/25/2005.	Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ate atent Application (PTO-152)				

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#### **DETAILED ACTION**

### Response to Amendment

1. The amendment filed July 11, 2005 has been entered; no new claims have been introduced.

## Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 3. Claim 2 and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Fukuyama et al. ("Fukuyama") USPN 6,831,406 (of record).

Fukuyama discloses fig. 6 a blue organic light emitting device comprising an organic compound film interposed between an anode 10 and a cathode 18, the organic compound film comprising: a hole transporting region 12 comprising a hole transporting material on the anode; a first mixed region 28 comprising the hole transporting material and a host material on the hole transporting region; a light emitting region 14 comprising the host material to which a blue light emitting material is added (col. 5, lines 30-55), on the first mixed region; a second mixed region 26 comprising the host material and an electron transporting material on the light emitting region; and an electron transporting region 16 comprising the electron transporting material on the second mixed region; wherein the light emitting region does not include hole transporting material and the electron transporting material.

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Regarding claim 18, Fukuyama discloses (col. 5, lines 30-55 and col. 14, lines 11-20) a member comprising a fluorescent material that is capable of absorbing blue light emitted from a blue organic emitting device and emitting green or red light.

4. Claim 34 is rejected under 35 U.S.C. 102(e) as being anticipated by Fukuyama.

Fukuyama discloses fig. 6 a blue organic light emitting device comprising an organic compound film interposed between an anode 10 and a cathode 18, the organic compound film comprising: a hole transporting region 12 comprising a hole transporting material on the anode; a first mixed region 28 comprising the hole transporting material and a host material on the hole transporting region; a light emitting region 14 comprising the host material to which a blue light emitting material is added (col. 5, lines 30-55), on the first mixed region; a second mixed region 26 comprising the host material and an electron transporting material on the light emitting region; and an electron transporting region 16 comprising the electron transporting material on the second mixed region; and a member comprising a fluorescent material that is capable of absorbing blue light emitted from a blue organic emitting device and emitting green or red light. wherein the light emitting region does not include hole transporting material and the electron transporting material (col. 5, lines 30-55 and col. 14, lines 11-20).

### Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 26, 50, 57 and 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukuyama in view of Tang et al. ("Tang") USPN 6,384,529.

Fukuyama discloses the device structure including a display device (col. 1, lines 5-11) as recited in the claim, but does not specifically disclose an active matrix display.

Tang discloses (see col. 6, lines 14-37 and col. 7, lines 16-25) a full-color active matrix display comprising a fluorescent member that is capable of absorbing blue light emitted from a blue organic emitting device and emitting green or red light.

Therefore, it would have been obvious to one skilled in the art the time the invention was made to incorporate Tang's teachings with Fukuyama's device since that would provide a high-resolution full-color organic displays as taught by Tang.

As for claims 26 and 50, the prior art omits an electronic equipment selected from the group consisting of a portable/personal computer, video/digital camera and cellular phone. However, Examiner takes Official Notice that an electronic equipment comprising a full color device wherein said electronic equipment selected from the group consisting of a video camera or a digital camera is conventional and well known. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have employed any of the various electronic equipment since Examiner takes Official Notice that due to their low power consumption, full-color displays have become a necessary and indispensable structural element of an electronic equipment.

### Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action/Applicant's submission of an information disclosure statement under 37 CFR

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1.97(c) with the fee set forth in 37 CFR 1.17(p) on 8/25/05 prompted the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to A. Sefer whose telephone number is (571) 272-1921.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on (571) 272-1915.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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ANS

September 13, 2005

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